FULL TERM ABDOMINAL PREGNANCY WITH LIVE FETUS, STILL AN OCCURRENCE IN CONTEMPORARY OBSTETRICS PRACTICE: A CASE REPORT

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ABSTRACT

Abdominal pregnancy is an ectopic pregnancy in which the fetus develops in the peritoneal cavity. It is associated with significant morbidity and mortality. Advanced abdominal pregnancy is a rarity and difficult to diagnose pre-operatively. The diagnosis of such condition can be missed pre-operatively despite the use of prenatal ultrasound scan. We present an advanced case of abdominal pregnancy

A 38-year-old $G_4P_3^{+0}$ A3 was referred to us on 10th June 2015 with history of 9 months amenorrhea and intermittent abdominal pain. She gave a history of vaginal bleeding, severe abdominal pain and fainting attack in the first trimester for which she was managed conservatively in a private hospital. Abdominal examination revealed a uterine size of 38 weeks with the fetus in breech presentation. On pelvic examination the cervix was closed, posterior and un-effaced. Abdominal ultrasound scan revealed a live singleton pregnancy with an average gestational age of 40 weeks in breech presentation. In view of the breech she was planned for lower segment caesarean section during which she was found to have an advanced abdominal pregnancy.

Conclusion: Advanced abdominal pregnancy is rare and difficult to diagnose pre-operatively. High levels of suspicion are required to diagnose this entity.

Keywords: Ectopic pregnancy, Secondary abdominal pregnancy, Diagnostic error

INTRODUCTION

Abdominal pregnancy is defined as implantation in the peritoneal cavity, exclusive of tubal, ovarian or intra-ligamentery implantation.[1] It is a rare form of ectopic pregnancy with an incidence of 1 per 8099 hospital deliveries and account for 1-4% of all ectopic pregnancies.[1] It was first reported in 1708 as an autopsy finding.[2] Abdominal pregnancy can be primary where the fertilized ovum implants itself on an abdominal organ but majority of abdominal pregnancies are secondary where the fertilized ovum first implants in the uterus, ovaries or fallopian tubes and subsequently implants on the peritoneal surface following tubal abortion or uterine scar rupture.[3,4]

Abdominal pregnancy is a unique type of ectopic pregnancy that can be easily missed in routine obstetrics practice.[5,6] It usually has dramatic and catastrophic consequences both for the fetus and the mother. Its maternal mortality rate is 5.1 per thousand cases which was higher than that of a term pregnancy.[7] A viable fetal outcome is extremely rare.

We report a case of an advanced abdominal pregnancy with a live fetus. After laparotomy, a healthy female baby was delivered.

CASE REPORT

A 38-year-old $G_4P_3^{+0}$ A3 was referred to us from a private hospital in Maiduguri on 10th June 2015 with history of amenorrhea of 9 months (she was not sure of her last menstrual period) and intermittent abdominal pain. There was a preceding history of severe lower abdominal pain with fainting attack

and slight vaginal bleeding at 2 months of pregnancy for which she was managed conservatively in the referring private hospital. Thereafter she had no remarkable complain. She had regular antenatal checkup throughout her pregnancy in the same private hospital.

On admission the patient was dyspnoeic and moderately pale. Her pulse rate was 100beats per minutes and the blood pressure was 120/80 mmHg. The apparent uterine size was 38 weeks with longitudinal lie and breech presenting fetus; fetal heart rate was 150beats. There were no palpable uterine contractions.

Vaginal examination showed a posteriorly placed cervix which was effaced with a closed cervical Os. The presenting part was high up. Her PCV was 28% and blood group was 0 Rh positive.

Abdominal ultrasonography revealed a single live intra-uterine pregnancy of 40 weeks with footling breech. In view of the footling breech, she was counseled for lower segment caesarean section.

The operation was done under spinal anaesthesia. The abdomen was entered via pfannenstiel incision. As the rectus sheath was opened, meconium stained amniotic fluid in the fetal sac was visualized beneath the parietal peritoneum which was incised to deliver a live female baby weighing 3.5Kg after doubly tying and cutting the umbilical cord. The baby's Apgar scores were 7 and 8 at 5th and 10thminutes respectively. The baby has no any obvious deformity or gross congenital anomaly.

The placenta was attached to the peritoneum around the left fallopian tube; the left ovary was also embedded in the placenta necessitating a left adnexectomy to remove the placenta along with the adnexa to achieve haemostasis. The right tube and ovary were normal.

The patient was stable throughout the post operative period; she was discharged home on the 8th postoperative day. Both mother and baby were doing well.

DISCUSSION

Abdominal pregnancy is a rare form of ectopic pregnancy;[8] it is usually secondary. To be considered as primary the pregnancy must satisfy the three criteria defined by Studdiford[9]:1- Both tubes and ovaries must be in normal condition with no evidence of remote injury, 2- no evidence of retroperitoneal fistula should be found, 3- the pregnancy must be related exclusively to the peritoneal surface and must be early enough in the gestation to eliminate the possibility of secondary implantation following primary implantation in the tube. In our case these criteria for primary abdominal pregnancy were absent, so we assume that it may have been a case of secondary abdominal pregnancy.

Lower abdominal pain, vaginal bleeding and fainting attack at 8 weeks of gestation coincides with the peak period of ruptured ectopic pregnancy.[10] It is probably that in the patient presented the initial suspected ectopic pregnancy ruptured and subsequently re-implanted in the peritoneal cavity at that period.

Presentation of abdominal pregnancy may vary and high index of suspicion is required for the diagnosis as history and physical examination are often inconclusive. Abdominal pregnancy may present with any of these clinical features:[10] history of bleeding or excessive abdominal pain during the first trimester with preceding history of abortion, pelvic surgery or infertility; bleeding or non labour abdominal pain during the third trimester; abnormal fetal lie; painful fetal movement; displaced cervix or uterine mass palpable apart from the fetus; oligohydramnios; unusual echogenic appearance of the placenta and failed induction of labour. In our case the patient presented with complaints of abdominal pain, and examination revealed malpresentation and displaced cervix. She also gave a history of severe abdominal pain, vaginal bleeding and fainting attack during the first trimester.

Sonographic diagnosis of abdominal pregnancy is missed in half of the cases.[11] Diagnostic errors in different series have ranged from 50-90 %[11]. Akhan et al [12] reported the following criteria as suggestive of abdominal pregnancy: 1-visualisation of the fetus separate from the uterus; 2-failure to visualize the uterine wall between the fetus and the maternal

urinary bladder; 3- close approximation of fetal parts to the maternal abdominal wall; 4-eccentric position or abnormal fetal attitude and 5-visualization of extra-uterine placental tissue.

The diagnosis of abdominal pregnancy was missed in our patient on ultrasound study as it was misdiagnosed as intra-uterine pregnancy. The diagnosis was only made at surgery most likely because it was not suspected buttressing the importance of keeping high index of suspicion for its diagnosis.

When in doubt MRI and CT scan are excellent diagnostic tools[13] and also help in planning management. MRI is a safe imaging method giving clarity of images in multiple planes, and clear definition of the placenta and its visualization with no ionizing radiation.[14]

Due to high fetal and maternal morbidity and mortality in abdominal pregnancy with high risk of placental separation and increase incidence of congenital malformation, it is common practice to terminate the pregnancy as soon as possible.[14] When abdominal pregnancy is diagnosed in the first or early second trimester surgical intervention is recommended without delay. However due to the late presentation of our patient, the condition remained undiagnosed until advanced stage of gestation. In a more advance stage, there is controversy regarding the optimal time to operate. Conservative approach is usually adopted in potentially viable pregnancies remote from term to gain fetal maturity in the absence of fetal gross malformation, placental implantation remote from upper abdomen, good maternal condition, close management in the tertiary care hospital, and the patient previously informed of the risk and outcomes.[15] Undiagnosed asymptomatic abdominal pregnancy may go up to 38weeks but once the diagnosis is made as in this case laparotomy is recommended.[15,16]

Management of placenta in advanced abdominal pregnancy is still a matter of discussion; no consensus exists on management of placenta and each case is managed on individual basis according to intra-operative findings.[15,16] Often, the placenta separates on its own after delivery of the baby, however if did not separated controversy exists whether it should be removed or left insitu. Catastrophic hemorrhage and damage to adjacent structures may occur during its removal, whereas leaving it in situ may lead to secondary hemorrhage, abscess formation, adhesions, coagulopathy, a need for secondary surgery or a need for longer follow up.[17] Placental removal is done after assessing the safety and feasibility of removing it.[17,18] In this case the placenta was implanted on the left adnexa which was completely removed without complication.

About 20% of babies born after abdominal pregnancies have malformations or deformities probably due to compression of the fetus in the absence of amniotic fluid buffer[19]. Typical deformities include limb defects, facial and cranial asymmetry, joints abnormality and central nervous system malformation. In this case the baby is protected by the surrounding amniotic fluid and sac which could explain the absence of any gross deformity.

CONCLUSION

Abdominal pregnancy is an uncommon but serious and potentially life threatening condition. In the above case, the pregnancy was carried to term without diagnosis despite regular ante-natal care. The diagnosis was missed pre-operatively even with the use of ultrasonography. Keeping high index of suspicion may reduce the diagnostic error.

REFERENCES

1. Farhat R, Roohi M.Full term secondary abdominal pregnancy, a case report. Professional Med J 2006; 13(2): 330-332
2. Nunyalulendho N D, Einterz EM. Advanced abdominal pregnancy. case report and review of 163 cases reported since 1946. Rural and remote Health 2008; 8:1087
3. Adesiyun AG, Audu AI. Term extra-uterine pregnancy in a Nigerian mother: a complication of uterine dehiscence. ARCH Gynaecol Obstet 2009; 279:75-77
4. Ayinde OA, Aimakhu CO. Adeyanju OA,

Omigbodum AO. Abdominal pregnancy at the University College Hospital, Ibadan: a ten year review. Afr J Reprod Health 2005; 9: 123-7

5. Pednekar R, Jindal D, Surve S. Successful outcome in a near term secondary abdominal pregnancy presenting as diagnostic dilemma, a case report. IOSR J Dent and Med Scien 2013; 8(6): 83-86
6. Ikechebelu JI, Unwusulu DN, Chukwungbo CN. Term abdominal pregnancy misdiagnose as abruption placenta. A case report. Niger J ClinPract 2005; 8:43-5
7. Yaliwal RG, Jaju BP, Mudanur RS, Bidri SR, Sajjanar RS. Advanced abdominal pregnancy: still in occurrence in Modern Medicine; a case report. South African Federation Obstet Gynaecol 2010; 2(3): 225-226
8. Kar S. Primary abdominal pregnancy following intra-uterine insemination. J Hum Reprod Sci 2011; 4: 95-9
9. Studdiford WE. Primary peritoneal pregnancy. Am J Obstet Gynaecol 1942: 44-487
10. Yusuf N, Nahar N, Bebum M, Nider T. Advanced abdominal pregnancy with a live fetus: a case report and review. ORION Med J 2010; 33(1):733-734
11. Berthrand G, Ray CL, Emond LS, Dubois J. Imaging in the management of abdominal pregnancy: a case report and review of the literature. J Obstet Gynaecol Can 2009; 31(1): 57-62
12. Akhan O, Cekirge S, Senaati S, Besim A. Sonograghic diagnosis of an abdominal ectopic pregnancy. AJR Am J Radiol 1990; 155: 197-8
13. Mittal SK, Singh N,Verma AK, Agarwal H, Kulkarni CD, Kanaujia R. Fetal MRI in the pre-operative diagnosis and assessment of secondary abdominal pregnancy: a rare sequele of a previous caesarean section. A case report. Diag Inter Radiol 2012; 18: 496-502
14. Teng HC, Kumar G, Ramli NM. A viable secondary abdominal pregnancy resulting from rupture uterine scar: Role of MRI. A case report. Brit J Radiol 2007; 80: 134-136
15. Masukume G, Sengurayi E, Muchara A, Mucheni E, Ndebele W, Ngwenya S,: Full term extra-uterine pregnancy complicated by post operative ascites with successful outcome: a case report. J Med Case Reports 2013; 7: 10
16. Chitra KLS. Viable abdominal pregnancy; a case report. J Obstet Gynaecol India 2007; 57(2):169-170
17. Ekele BA, Ahmad W, Nnadi D, Ishaka K. Abdominal pregnancy: ultrasound diagnosis aided by the baloon of a foley catheter. Acta Obstet Gynaecol Scand 2005; 84: 701-2
18. Vidushi JJ, Vineeta G,Neeta B, Anuja N. An unusual case of secondary abdominal pregnancy presenting after MTP Pill Intake; a case report. Inter J Gynae Plastic Surgery 2013; 5(1): 44-46
19. Chaudhan H, Prajapati N. Full term abdominal pregnancy with death fetus: a case report , 20121:434, doi:10.4172/ scientific reports 434